# Solid and Hazardous Waste Management

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# MAKING A HAZARDOUS WASTE DETERMINATION

# Hazardous Waste Identification

Generators are required to <u>Accurately</u> determine if the wastes they generate are hazardous.

- 1. Determine if waste is excluded.
- 2. Determine if the waste is listed.
- 3. If waste is not listed, test it or apply knowledge of the hazard characteristics.
- 4. If it is hazardous, refer to parts 261, 264, 265, 266, & 268 for possible exclusions.
- 5. Determine if waste is a special waste as designated by the State in Appendix XI of 261.

#### Characteristic Wastes

Characteristic of ignitability



Characteristic of corrosivity



Characteristic of reactivity



Characteristic of toxicity



# GENERATOR STATUS AND REGULATORY REQUIREMENTS

# South Carolina Recognizes Three Categories of Hazardous Waste Generators

- **Conditionally Exempt (CESQG)** − Generates less than 220 lbs of hazardous waste in a <u>CALENDAR</u> month
- **>Small Quantity Generator (SQG) Generates** between 220, & 2200 lbs/ <u>CALENDAR</u> month
- ➤ Large Quantity Generator (LQG) Generates more than 2200 lbs/CALENDAR month
- Accurately determining your generator status will assist you in complying with the proper regulatory requirements.

#### Notification Requirements

- Everyone who handles hazardous Waste in SC is required to notify the Department of their hazardous waste activity (except Conditionally Exempt Small Quantity Generators).
- ➤ Notification is made using SCDHEC form 2701. You can get a copy of this form from the web site: www.scdhec.gov/administration/library/D-2701.pdf
- > Re-notify anytime anything changes.



#### Generator Fees

- > CESQG No fee
- SQG \$500.00 per year
- > LQG (under 100 tons/year) \$1000.00 per year
- LQG (100 tons/year and over) \$1000.00 per year plus \$1.50/ton (paid quarterly) not to exceed \$15,000.00
- Companies paying \$10.00/ton incinerator fee are exempt.
- Fees are paid for State Fiscal Year based on generator status established by January 31<sup>st</sup> of each calendar year.

# Overview of Universal Waste Regulations

- Streamlines hazardous waste management standards to ease regulatory burden for those who manage universal wastes
- Facilitate proper recycling
- > Intended to keep universal wastes out of landfills

#### What are Universal Wastes?

- Batteries
- > Pesticides
- Mercury Containing Equipment
- > Lamps

#### **Batteries Defined**

A universal waste battery is a device consisting of one or more electrically connected electrochemical cells designed to receive, store, and deliver electric current.

# What Can be Done With Batteries?

- Sort by type
- Mix battery types in one container
- Discharge current from batteries
- Regenerate used batteries
- Disassemble batteries or battery packs into individual cells
- Remove batteries from consumer products

# Battery Labeling Requirements

- Batteries may be labeled either:
  - "Universal waste Battery(ies)"
  - "Waste Battery(ies)"
  - "Used Battery(ies)

#### Pesticides Defined

A universal waste pesticide is a substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest or intended for uses as a plant regulator, defoliant, desiccant, and certain other animal drugs and feeds.

#### Types of Pesticides Covered

- Pesticides that are:
  - ➤ Stocks of a suspended and canceled pesticide that are part of a mandatory or voluntary recall under FIFRA. (e.g., Parathion)
  - Stocks of a suspended or cancelled pesticide, or a pesticide that is not in compliance with FIFRA, that are part of a voluntary recall by the registrant. (e.g., Dursban for Lawn & Garden uses)
  - Unused pesticide as part of a waste pesticide collection program

# What Can be Done with Universal Waste Pesticides?

- Manage in such a way to prevent releases:
  - > In containers, or
  - > Tanks (must meet hazardous waste storage requirements), or
  - Transport vehicles (subject to Department of Transportation requirements)

# Universal Waste Pesticide Labeling Requirements

- Universal waste pesticides must be labeled with either:
  - The original product label, or
  - "Universal Waste Pesticide(s)", or
  - "Waste Pesticide(s)".

#### Mercury Containing Equipment Defined

Mercury containing equipment means a device or part of a device (including thermostats, but excluding batteries and lamps) that contains elemental mercury integral to its function.

# Universal Waste Lamps Defined

The bulb or tube portion of an electric lighting device specifically designed to produce radiant energy in the ultra-violet, visible & infrared regions of the electromagnetic spectrum.

#### Types of Lamps Included

- ➤ The South Carolina Hazardous Waste Management Regulations give the following examples:
  - > Fluorescent
  - > High Intensity Discharge
  - > Neon
  - Mercury vapor
  - > High pressure sodium
  - > Metal halide

# What Must be Done With Universal Waste Lamps?

- Manage them in such a way as to prevent breakage.
- > Store them in containers that are structurally sound and adequate to prevent breakage.
- Store them in closed containers.
- Immediately cleanup any broken lamps
  - Broken lamps are subject to a hazardous waste determination.

#### Universal Waste Lamp Labeling Requirements

- "Universal waste –Lamp(s)"
- "Waste Lamp(s)"
- "Used Lamps(s)"

# Universal Waste and Generator Status

- > THERE IS NO CONNECTION BETWEEN THE STATUS AS A UNIVERSAL WASTE HANDLER AND THE TRADITIONAL STATUS AS A RCRAGENERATOR
- A company can be a large quantity handler of universal waste and a small quantity generator of hazardous waste (and vice versa)
- Universal waste handler status does not affect your generator fees – ONLY YOUR GENERATOR STATUS

# Non-Hazardous Solid Waste

# Examples of Non-Hazardous Solid Waste

- Municipal Solid Waste
- Industrial Solid Waste
- Construction/Demolition Debris
- Land Clearing Debris
- Waste Tires
- Used Oil

# Examples of Municipal Solid Waste

- Food Waste
- Office Waste

# What can be done with Municipal Solid Waste?

- Disposal in a Class III Landfill
- Recycle

# Examples of Industrial Solid Waste

- Off Specification Products
- Process Waste/By-products
- Sludges

## What can be done with Industrial Solid Waste?

- Characterize the Waste
- Disposal in a Class II or Class III Landfill according to characterization
- Recycle

# Examples of Construction and Demolition Debris

- \* Lumber
- Sheetrock
- Bricks / Concrete
- Insulation Material
- Glass
- Roofing Material

# What can be done with C&D Debris?

- Disposal in a Class II Landfill
- Recycle

# Examples of Land Clearing Debris

- Yard Trash
- Stumps
- Limbs
- Leaves

# What can be done with Land Clearing Debris?

- Disposal in a Class I or Class II Landfill
- Recycle

# What can be done with Used Oil and Tires?

- Recycle
- Must use a registered transporter
- Used Oil Transporter Registration Form's web address is: www.scdhec.gov/administration/library/D-2716.pdf
- Waste Tire Hauler Form's web address is: www.scdhec.gov/environment/lwm/forms/wtire\_regis.pdf

#### Questions?

- Contact the Division of Compliance and Enforcement
- Solid Waste Questions: Mr. Marty Lindler (803) 896-4205
- Hazardous Waste Questions: Mr. Clyde Buchanan (803) 896-4136
- www.scdhec.gov/environment/lwm